

## **TARGETED FAULT TOLERANCE BY SPECIAL CPU INSTRUCTIONS**

### ABSTRACT OF THE DISCLOSURE

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One embodiment disclosed relates to a microprocessor for targeted fault-tolerant computing. The microprocessor's decode circuitry is configured to decode a fault-tolerant version of an instruction and a non-fault-tolerant version of the instruction distinctly from each other. The 10 microprocessor's execution circuitry is configured to execute the fault-tolerant version of the instruction with redundancy checking and to execute the non-fault-tolerant version of the instruction without redundancy checking.